

FIG. 1A

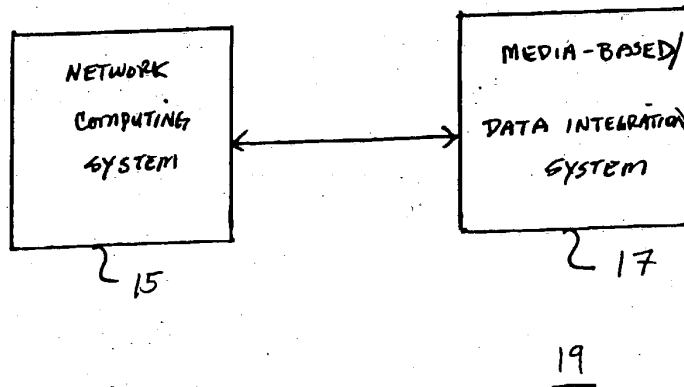
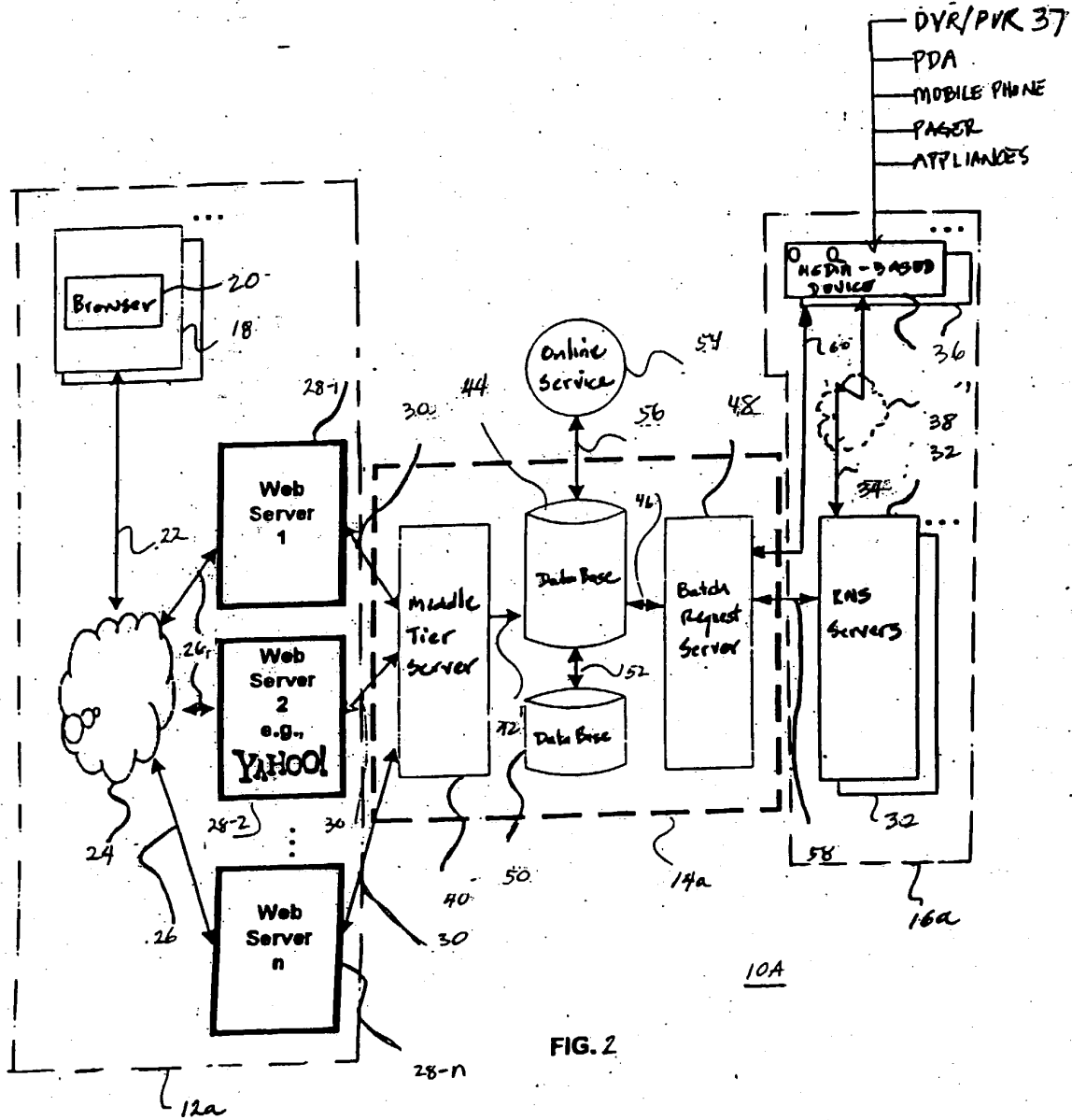


FIG. 1B



18/28/40/32/48/36

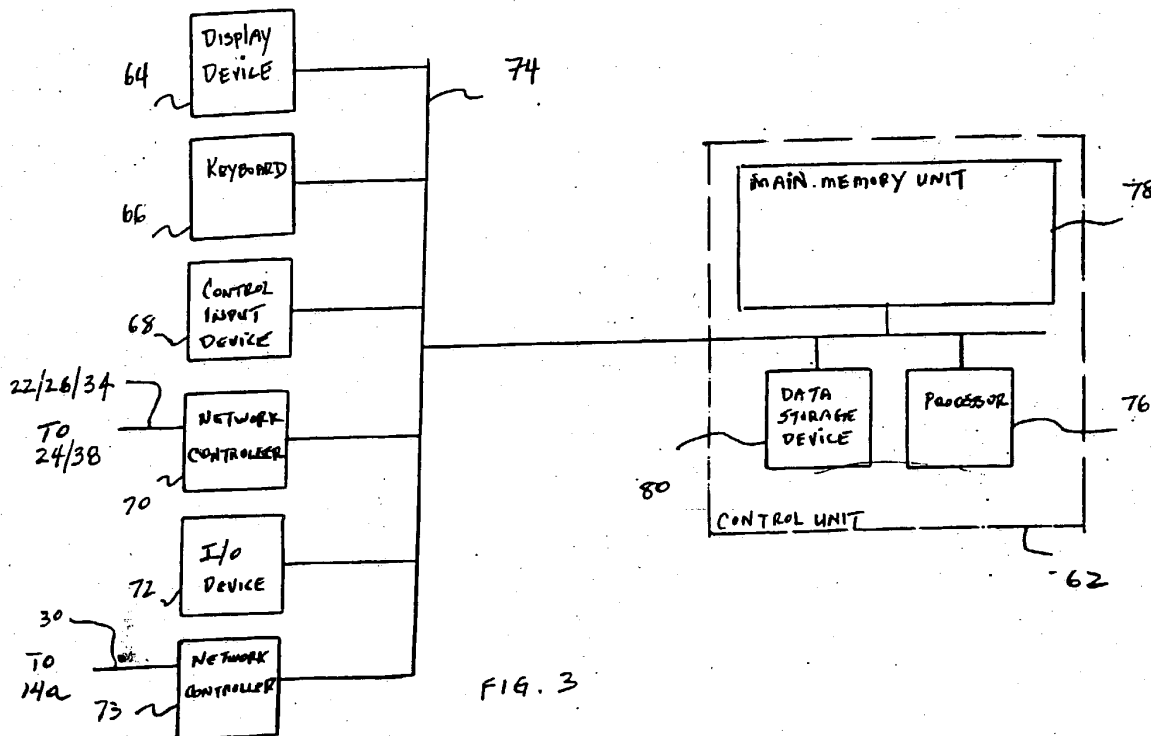


FIG. 3

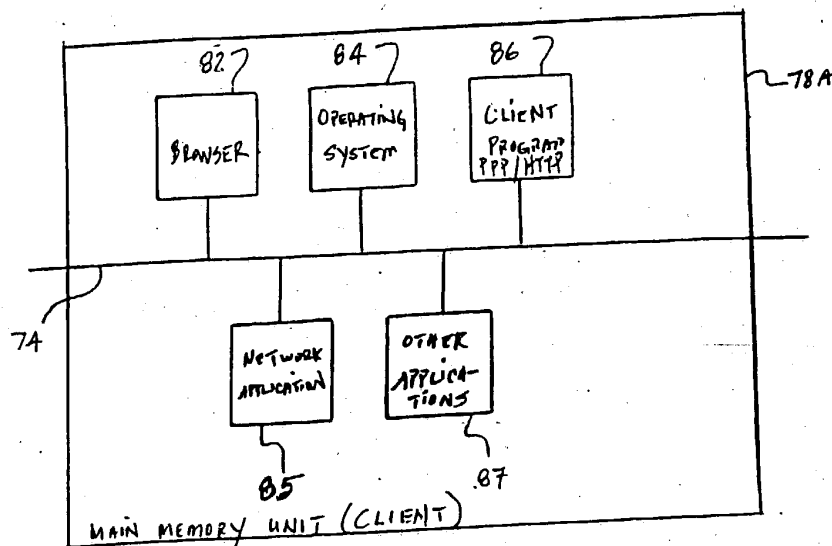


FIG. 4A

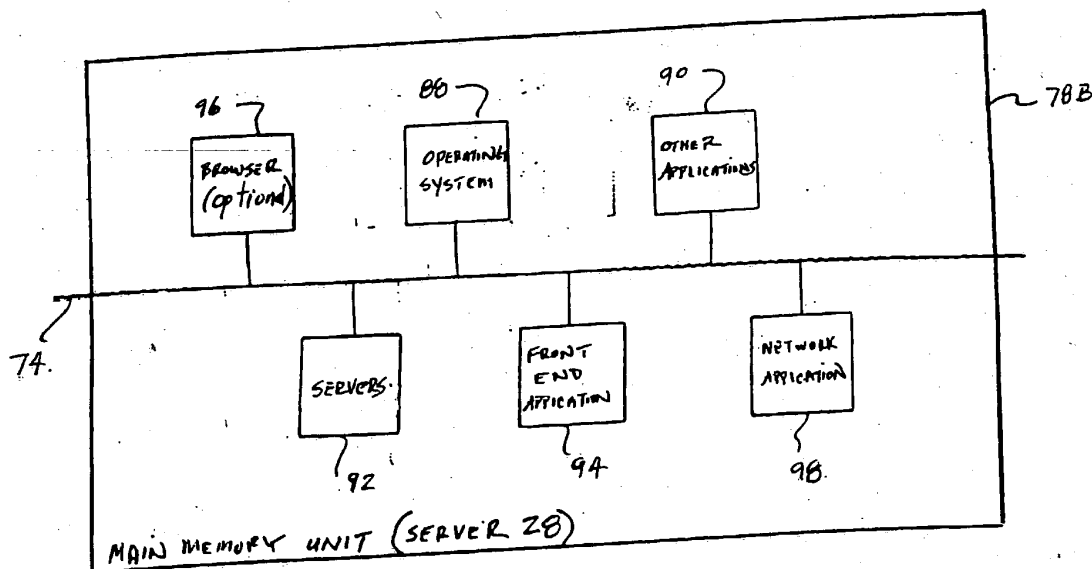


FIG. 4B

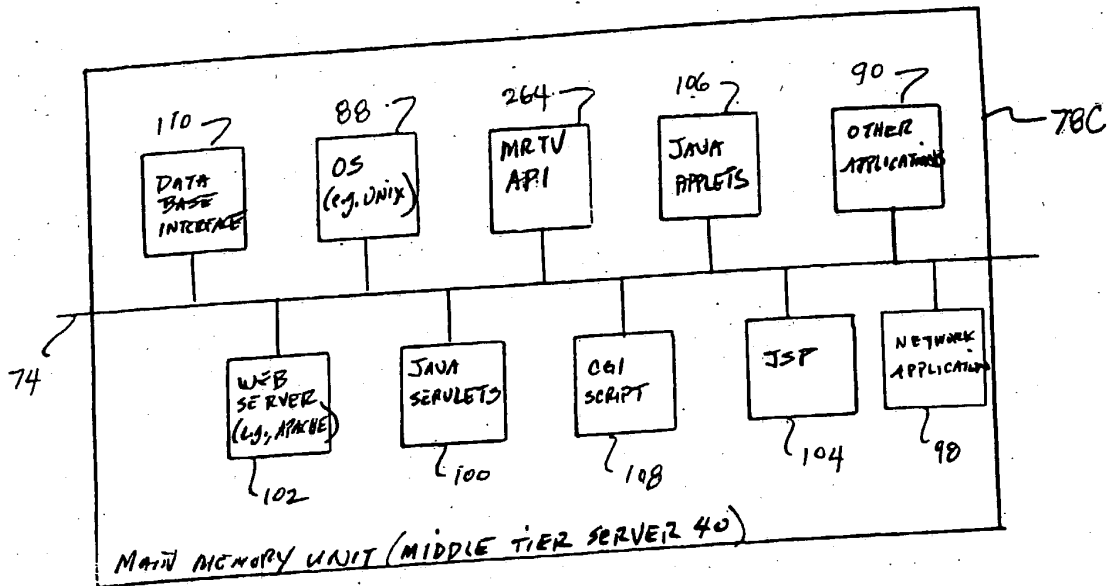


FIG. 4C

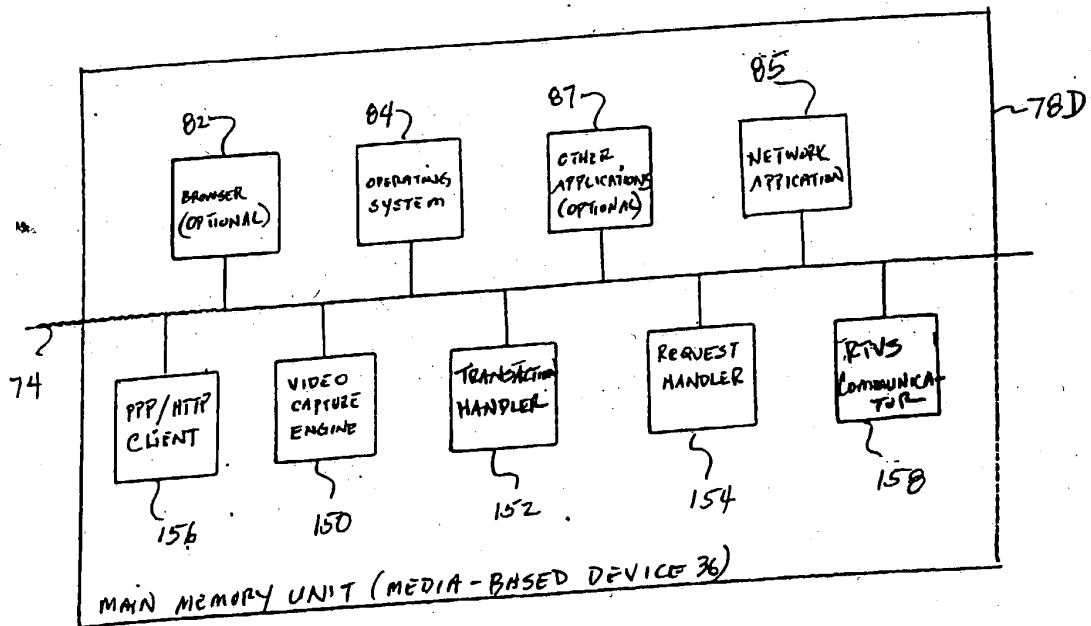


FIG. 4D

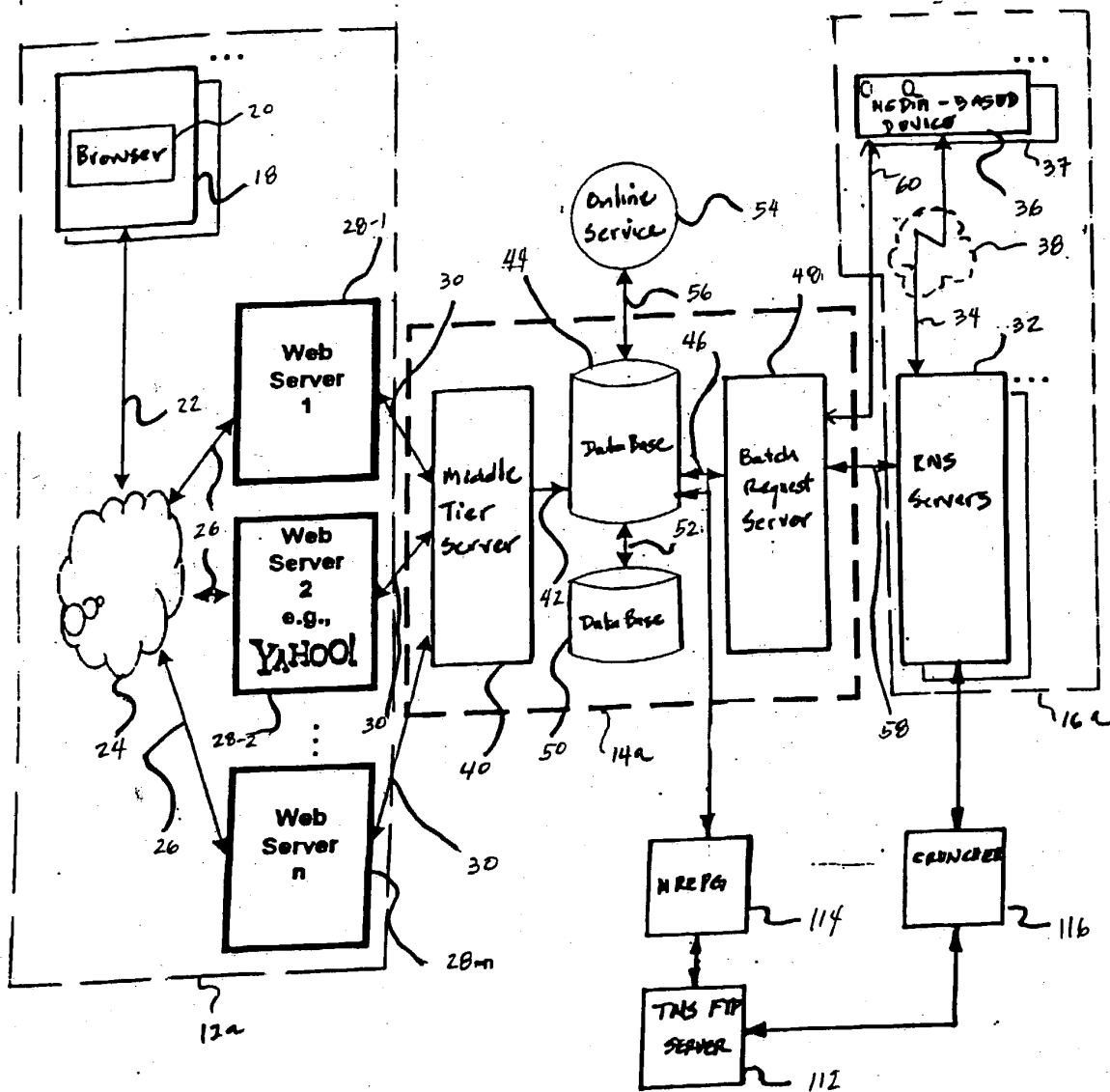


FIG. 5

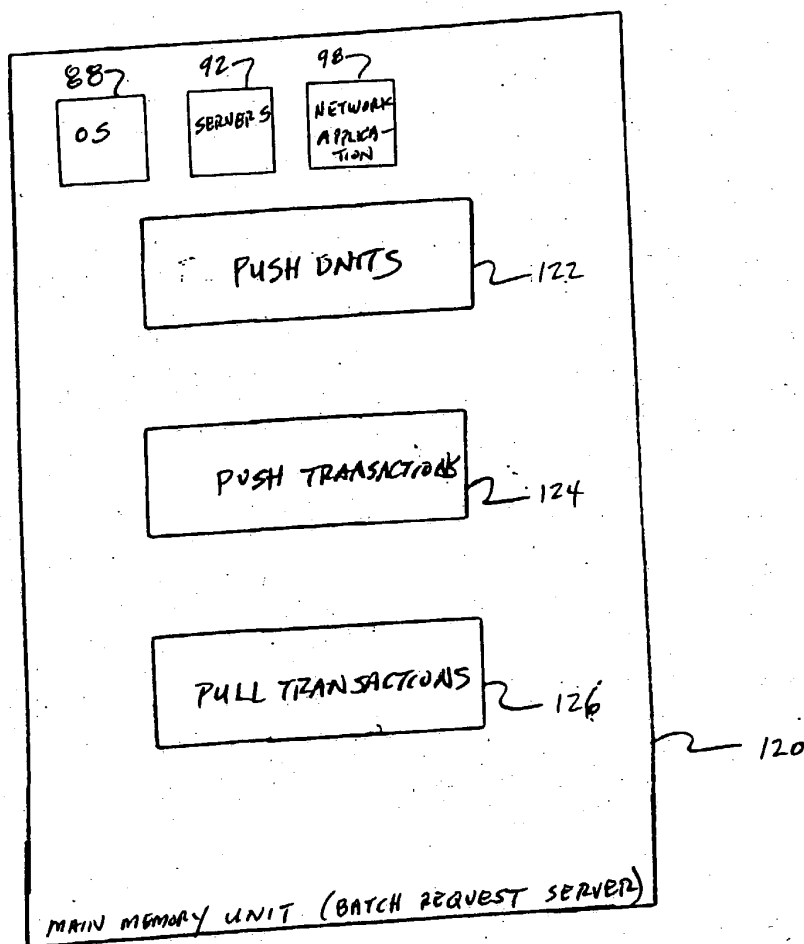


FIG. 6

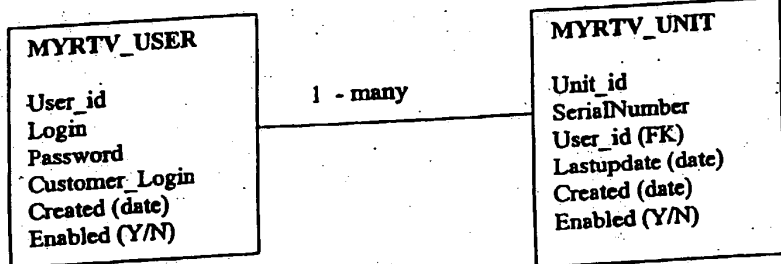


FIG. 7

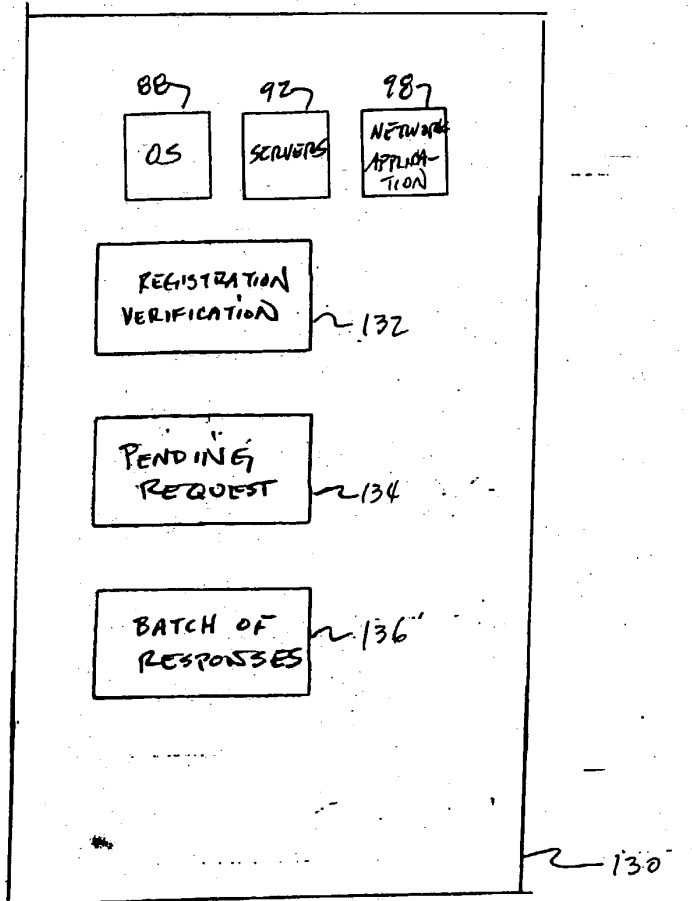


FIG. 8

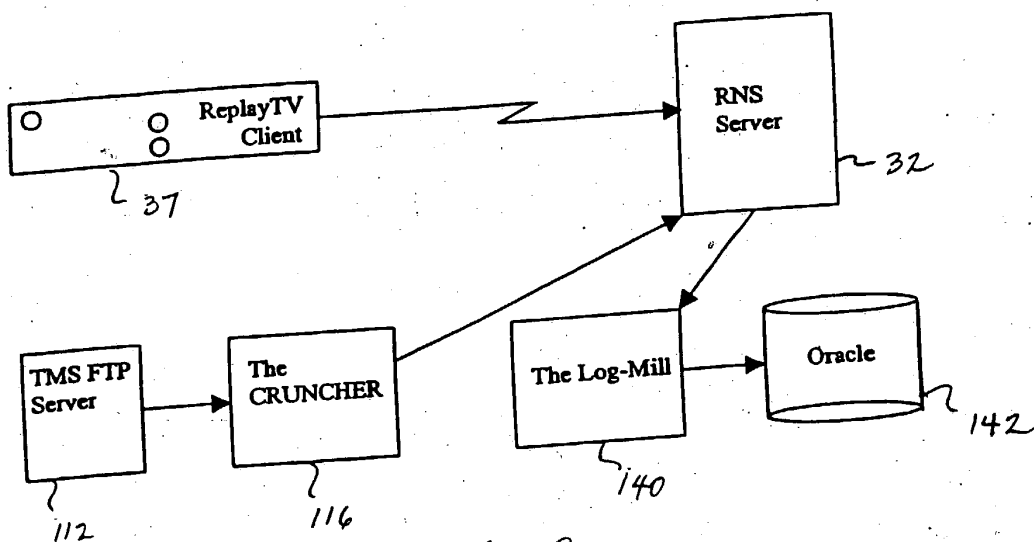


FIG. 9

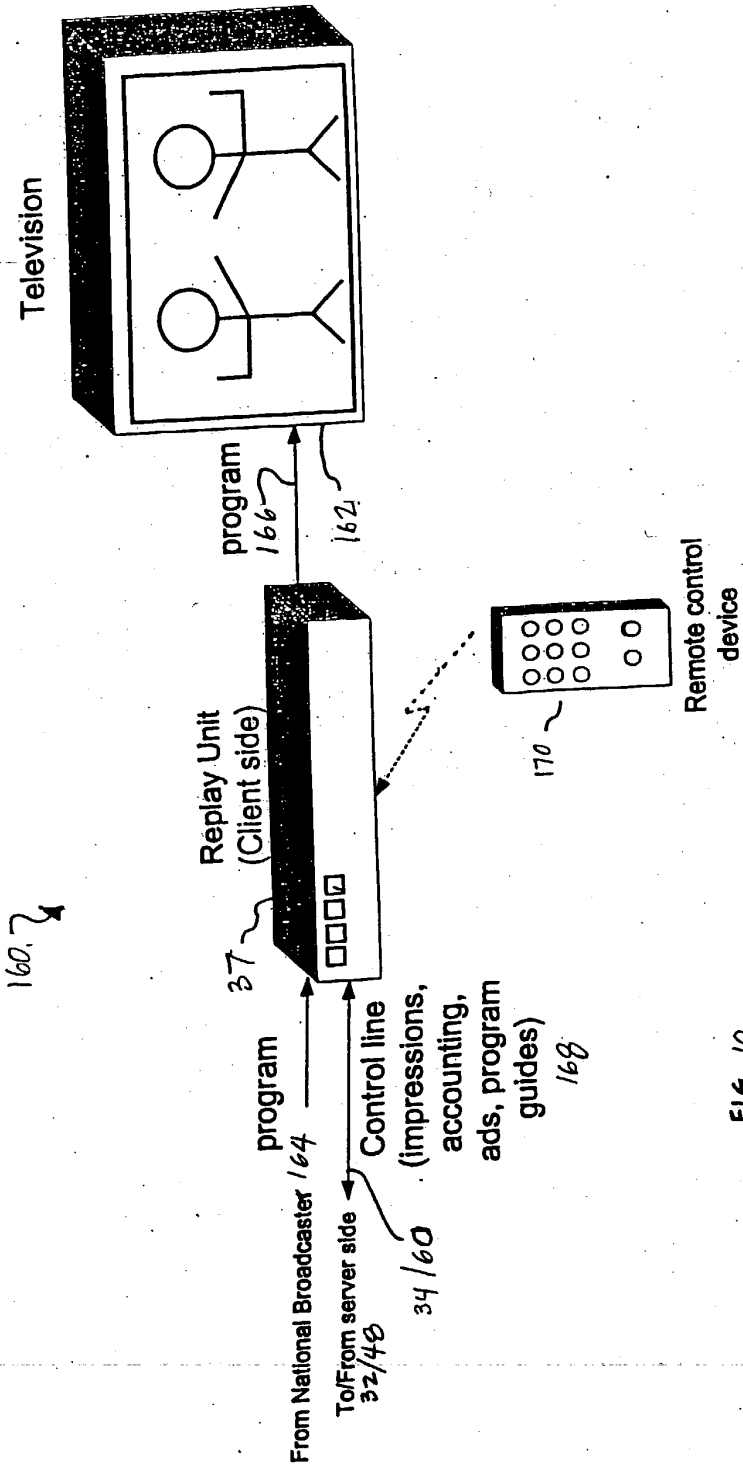


FIG. 10

my **r** replaytv

marketing/promotional information

user name:

password:

☐ remember my password [I forgot my password](#)

Are you a new user to the myreplaytv website?

[Help](#) [Contact Us](#)

182

184

180

FIG. 11

Channel Guide

Channel Guide

Preferences

Help

Logout

Today 03/06

6 pm

GO

192

Tue 3/06

6:00 PM

6:30 PM

7:00 PM

7:30 PM

0 OXYGEN

1 IN1

2 KTVU

3 LOOR003

4 KRON

5 KPIX

6 KICU

7 KGO

8 KTSF

9 KQED

10 KTEH

11 TVGOS

12 KBHK

13 KBWB

14 KDTV

An Officer and a Gentleman

Me, Myself & Irene

6 O'Clock Ne...

Local Origination

NewsCenter 4 at 6

CBS News

Home Improve...

ABC 7 News at 6PM

TV Patrol

Zoboomafoo

BBC World Ne...

TV Guide

The Simpsons

The Drew Car...

Noticias 14

Scary Movie

Seinfeld

Local Origination

Frasier

Evening Maga...

Family Feud

Jeopardy!

Little Salgo...

The NewsHour With Jim Le...

Antiques Roa...

TV Guide

Friends

Power of Att...

Carita de Angel

Spin City

Entertainmen...

Hollywood Sq...

Family Feud

Wheel of For...

Mandarin New...

EastEnders

Friends

The Drew Car...

Fig. 12A

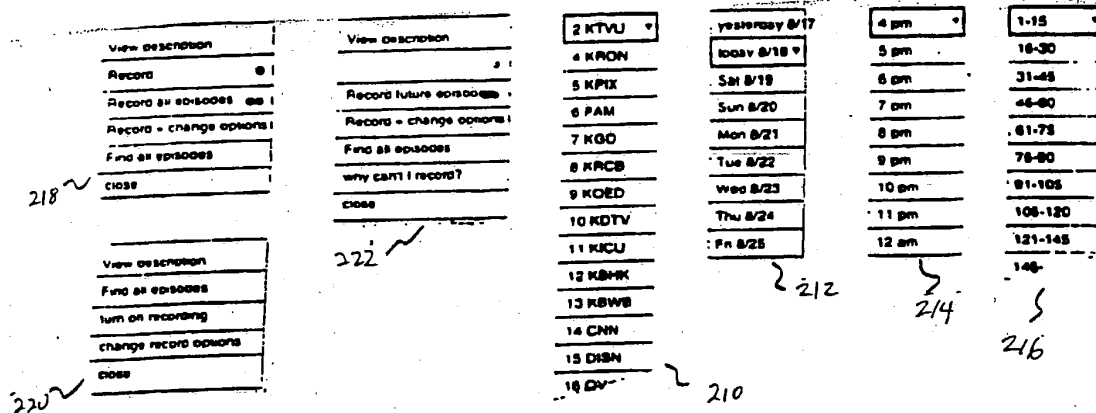


FIG. 12B

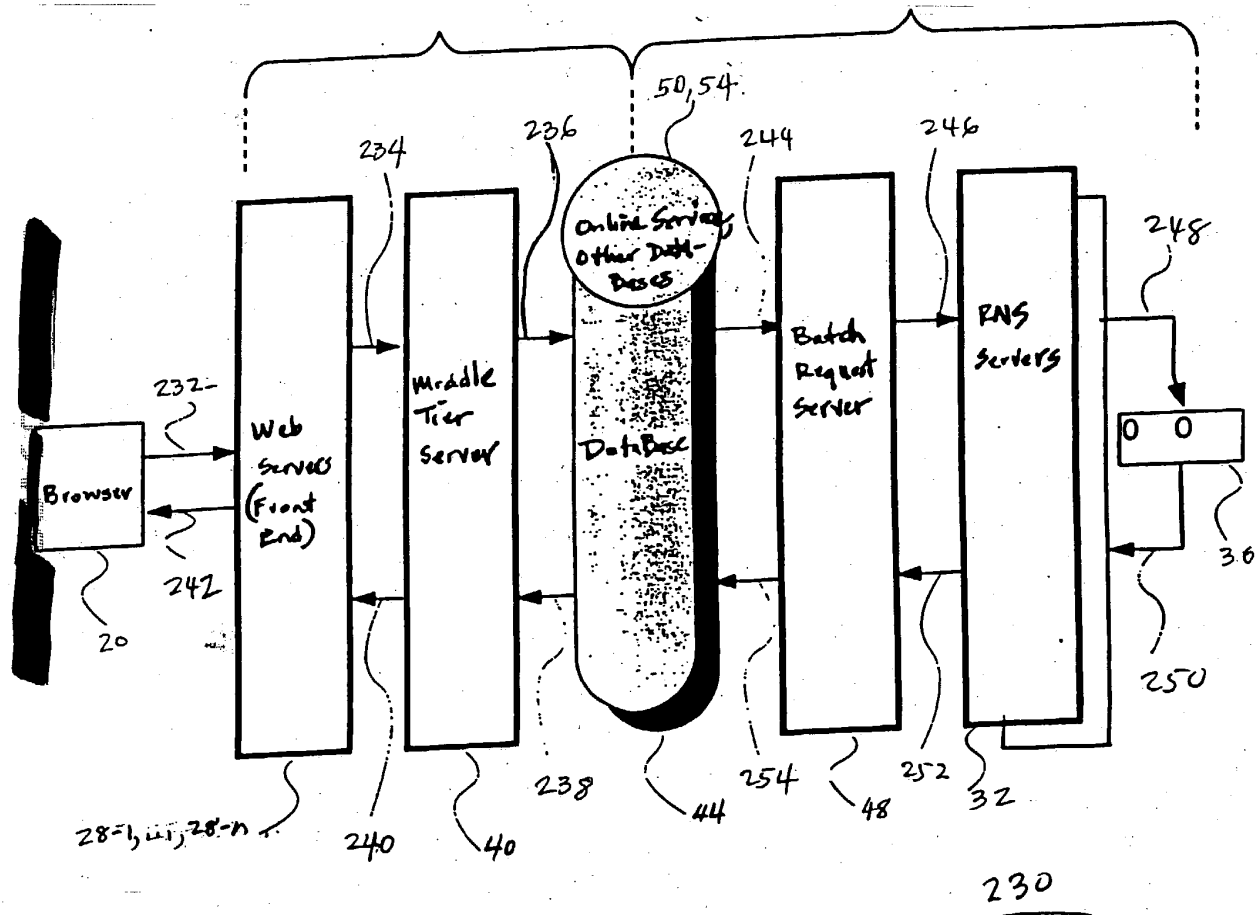


FIG. 13A

SEQUENCE DIAGRAM

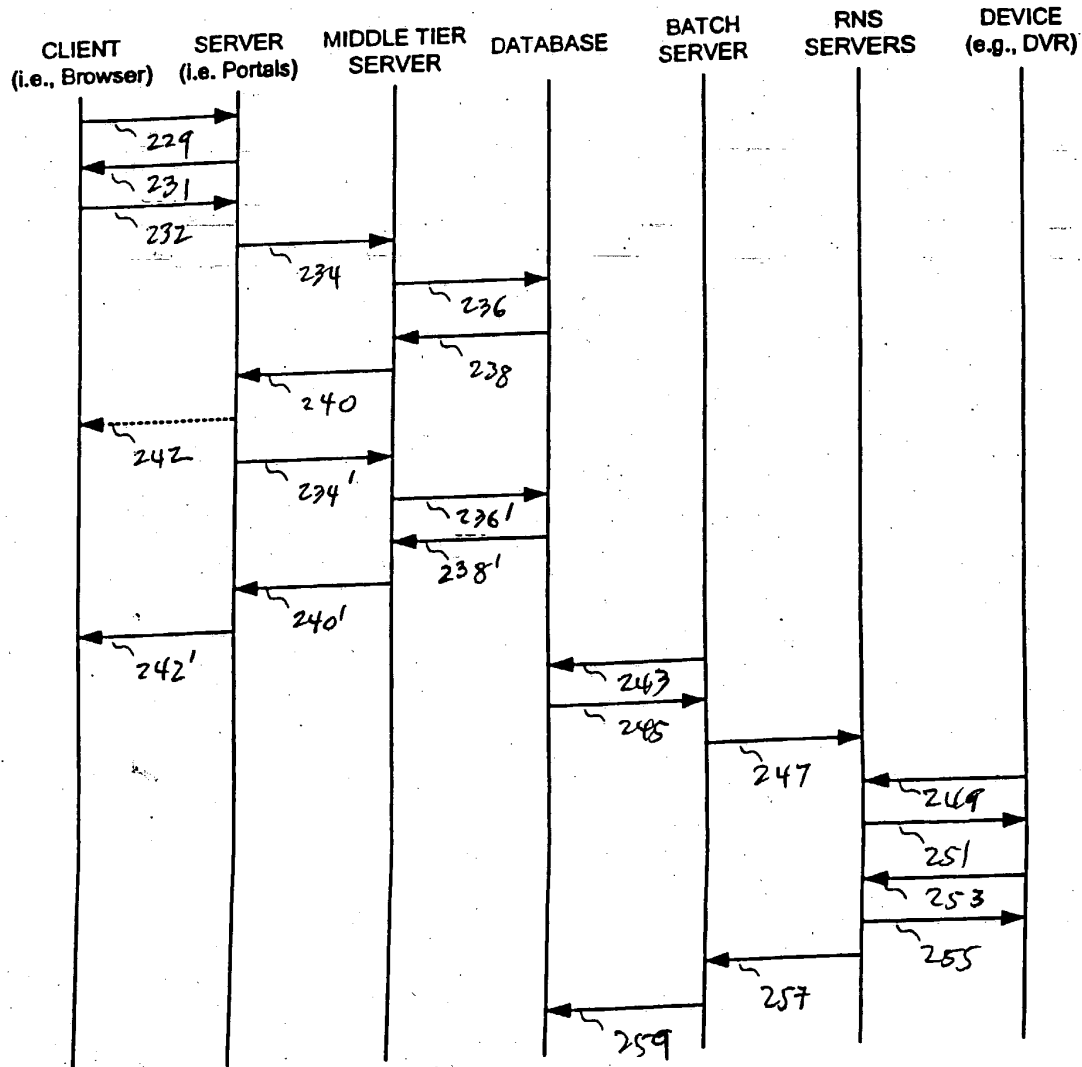


FIG. 13B

API Routine	Function
CreateAccount	Creates an account for a new user based on the information received
Login	Tries to authenticate a user based on the input username and password combination
GetProfile	Returns the profile of the user and his units based on his userid
AddRequest	Adds a request to the unit's list of pending requests based on a set of request parameters, and returns the full status of the unit and of the pending requests, including those for recording specified show(s) and deleting recorded show(s)
DeleteRequest	Delete a request from the user list of pending requests
GetReplayGuide	Returns the Replay Guide of the unit as saved in the appropriate database for the specified unit
GetChannelLineUp	Returns the channel lineup of the unit based on the unit's settings
ChangePassword	Lets the user changes his password
GetEPG	Returns the current electronic program guide for the unit based on the settings of the unit
ShowGuide	Returns detailed information about a specified show or search show details for particular shows based on criteria given as parameters

FIG. 14

API Routine	Input Parameters	Output Files (Corresponding XML elements)
CreateAccount	firstname, lastname, address1, address2, city, state, zipcode, serialnumber, login, password, creator	ACCOUNT.XML REPLAYERERROR.XML
Login	login, password	ACCOUNT.XML REPLAYERERROR.XML
GetProfile	userid	PROFILE.XML (USERINFO, UNITINFO-I) REPLAYERERROR.XML
AddRequest	userid, unitid, reqtype(none, show, theme, update) reqtype=show; showtype(single, repeat, manual single, manual repeat), headendid, tmsid, device, starttimegmt, name, durationinminutes, inputsource, quality, guaranteedrecord, numepisodes, weekdays, earlystartminutes, showguaranteedminutes reqtype=theme; searchterm, searchflags, suzukiid, durationinminutes, quality, guaranteedrecord reqtype=update; updateinfo(delete, show, preserves, show, deletechannel), channelid, showid	UNITSTATUS.XML (UNITINFO, REQUESTSTATUS-I) REPLAYERERROR.XML *Note: REQUESTSTATUS Result:=(PENDING, SENT, SUCCESS, GENERAL FAILURE, SCHEDULEFAILURE, ROOMFAILURE)
DeleteRequest	userid, unitid, requestid	DELETERESULT.XML REPLAYERERROR.XML
GetReplayGuide	userid, unitid	GUIDE.XML (REPLAYCHANNEL-I) REPLAYERERROR.XML *Note: REPLAYCHANNEL Type:=(SINGLE, SINGELMANUAL, REPEAT, REPEATMANUAL, THEME, THEMEXACT, ZONE)
GetChannelLineUp	userid, unitid	CHANNELLINEUP.XML (CHANNEL-I) REPLAYERERROR.XML
ChangePassword	userid, currentpassword, newpassword	ACCOUNT.XML REPLAYERERROR.XML
GetEPG	userid, unitid, starttimegmt, durationinminutes, startchannel, channelcount	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERERROR.XML
ShowGuide	userid, unitid, query, start, count, levelofdetail *Note: query keywords include actor, advisory, desc, mpaarating, title, etc.	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERERROR.XML

FIG. 15

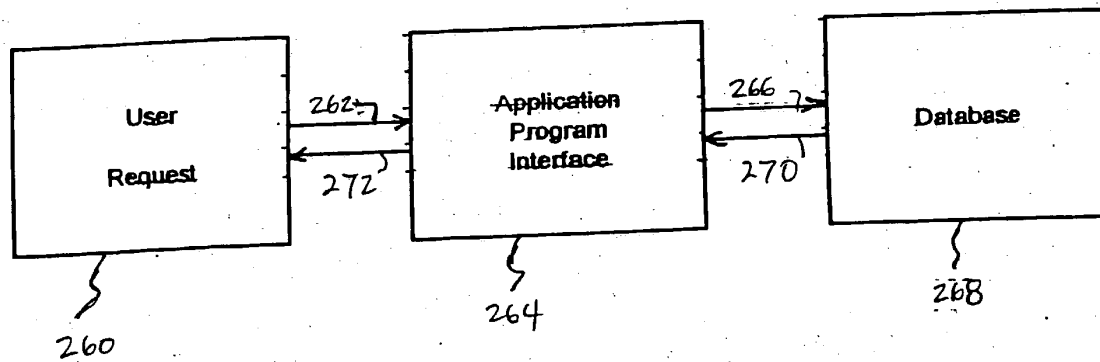


FIG. 16A

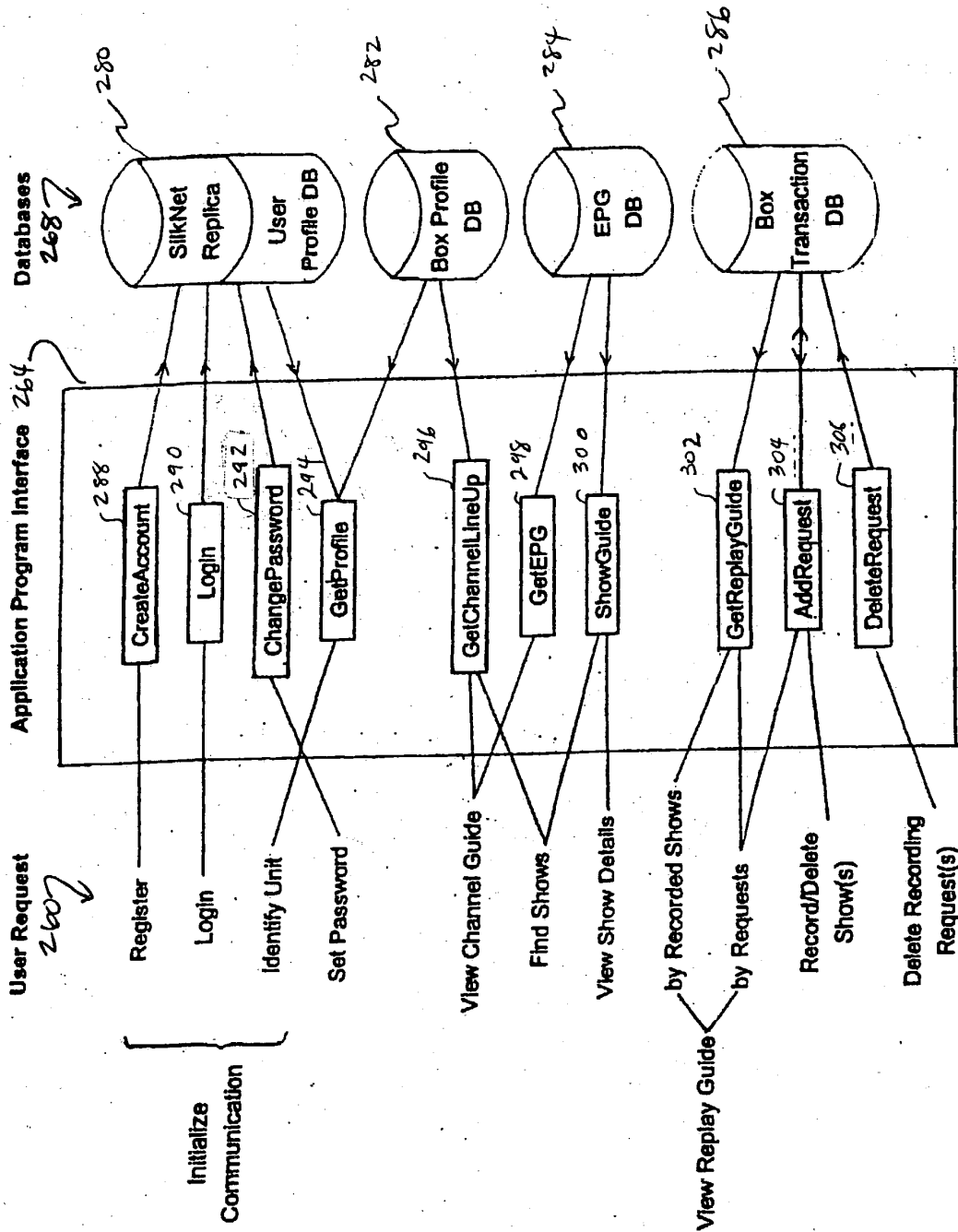


FIG. 16B

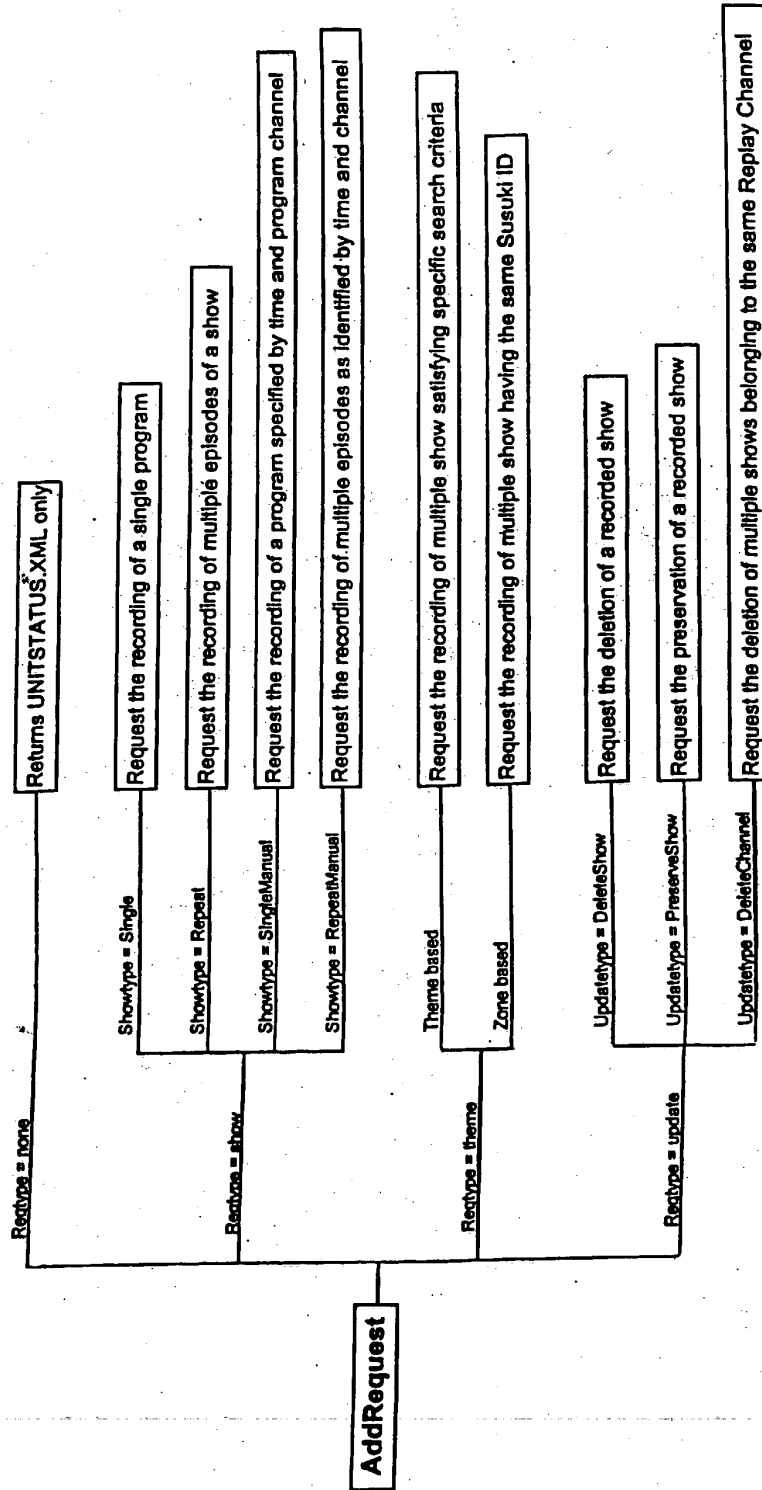


FIG. 17

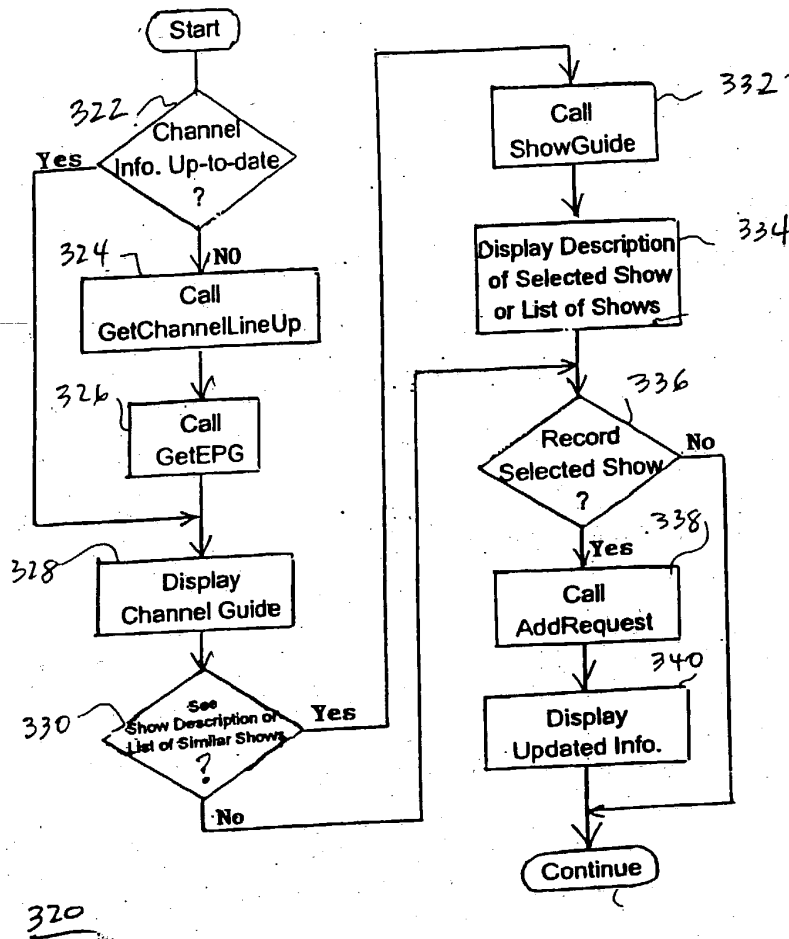


FIG. 18

replaytv

Channel Guide

Replay Guide

Replay Shows

Replay Channels

Preferences

Help

Logout

What are you doing with your DVR? Are you recording TV?

Replay Shows

Channel	Details	Status	Request Date
<input type="checkbox"/> A Fistful of Dollars	This single record Replay channel was scheduled to record A Fistful of Dollars from Channel 21(TBS) on Sun, 02/18 at or around 7:00AM - 9:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		02/18
<input type="checkbox"/> Blown Away	This single record Replay channel was scheduled to record Blown Away from Channel 42(USAP) on Tue, 01/16 at or around 9:00PM - 11:30PM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/16
<input type="checkbox"/> Cantonese News	This show-based Replay channel will continuously record the 1 most current episode(s) of Cantonese News occurring every (Sun, Mon, Tue, Wed, Thu, Fri, Sat) on Channel 8(KTSF) at or around 8:00PM - 9:00PM. Guaranteed at EXTENDED quality.		02/28
<input type="checkbox"/> Captain January	This single record Replay channel was scheduled to record Captain January from Channel 49(AMC) on Tue, 01/09 at or around 3:30AM - 5:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/09

FIG. 19A

2-350

Channel Guide
Replay Guide
Find Shows
Manual Record

Preferences
Help
Logout

Replay Shows
Replay Channels

Replay Guide

ReplayTV: Since 1988, we've been making it so easy to watch your favorite TV shows.



Channel	Show Title/Episode	Date/Time	Station	Duration	Size
A Fistful of Dollars	<input type="checkbox"/> A Fistful of Dollars	02/18 7:00AM	21 TBS	(2h)	6.46%
Blown Away	<input type="checkbox"/> Blown Away	01/16 9:00PM	42 USAP	(2h 30m)	8.07%
Captain January	<input type="checkbox"/> Captain January	01/09 3:30AM	49 AMC	(1h 30m)	4.84%
Firewalker	<input type="checkbox"/> Firewalker	02/27 8:00PM	21 TBS	(2h)	6.46%
On Deadly Ground	<input type="checkbox"/> On Deadly Ground	01/07 9:00PM	4 KRON	(2h)	6.46%
Platoon	<input type="checkbox"/> Platoon	02/04 8:00PM	37 TNT	(2h 30m)	8.07%
The Bridge on the River Kwai	<input type="checkbox"/> The Bridge on the River Kwai	12/24 8:00AM	42 USAP	(3h 30m)	11.30%
The Little Princess	<input type="checkbox"/> The Little Princess	12/26 4:15AM	49 AMC	(1h 45m)	5.65%
The Trouble With Harry	<input type="checkbox"/> The Trouble With Harry	12/18 1:05PM	49 AMC	(1h 55m)	6.19%
Welcome to ReplayTV	<input type="checkbox"/> Welcome to ReplayTV	09/08 10:49AM		(15m)	2.42%

FIG. 19B

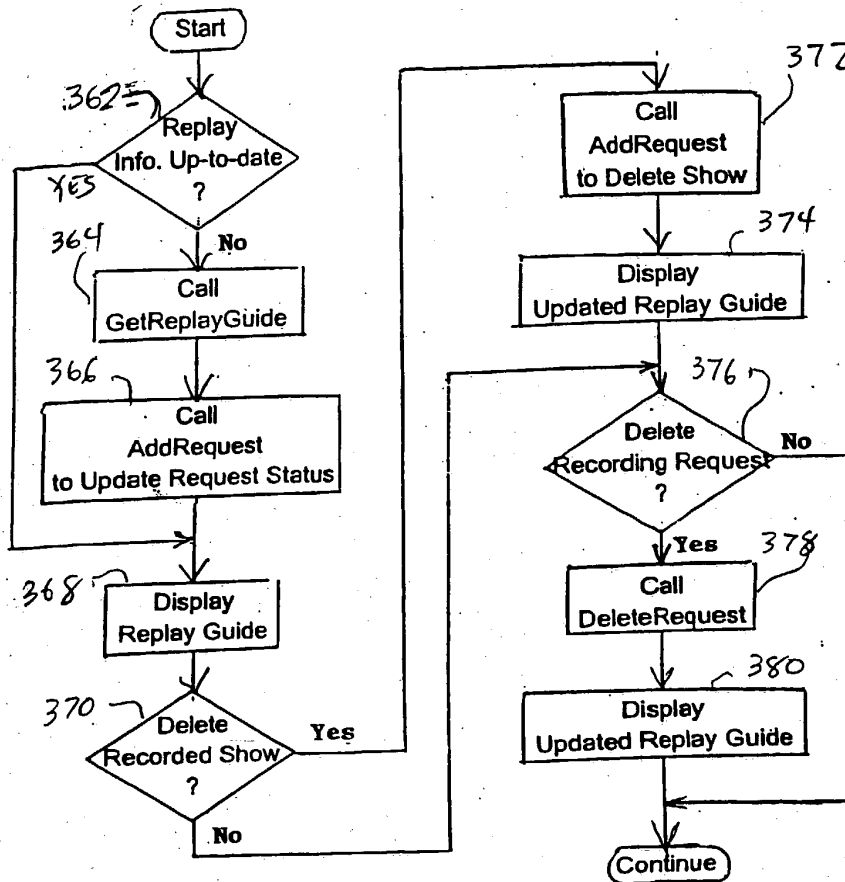


FIG. 20

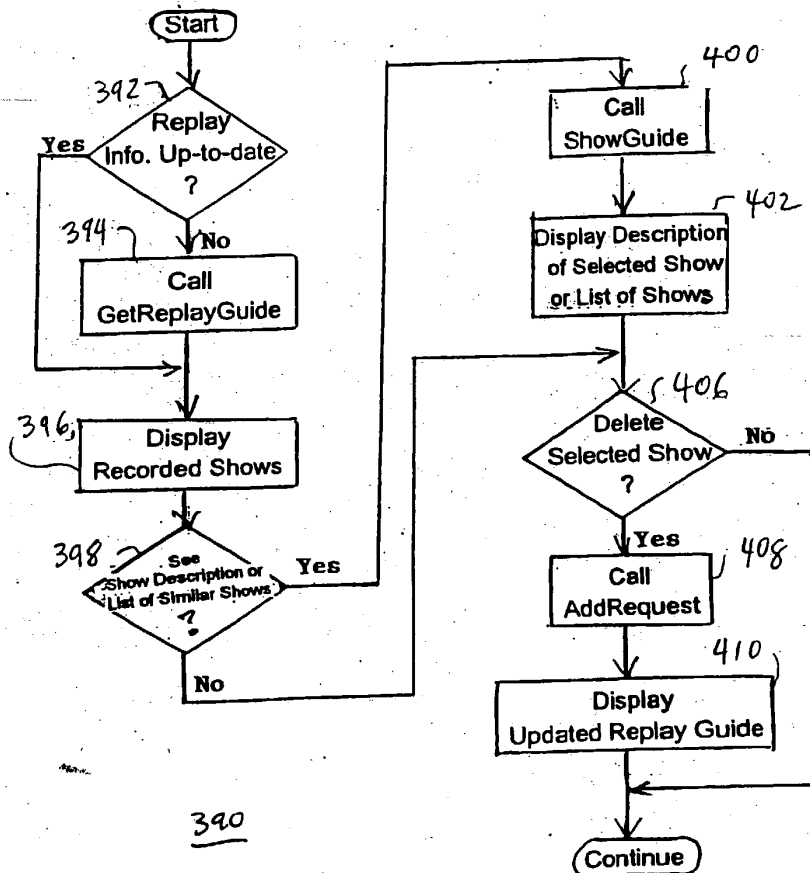



FIG. 21

**Find Shows**

[Channel Guide](#) [Replay Guide](#) [Find Shows](#) [Preferences](#) [Help](#) [Logout](#) [Manual Replay](#)

Find:

Enter the word or phrase that you wish to find.

In these categories:

- ☒ Show Titles
- ☒ Descriptions
- ☐ Actors
- ☐ Directors

Find Shows

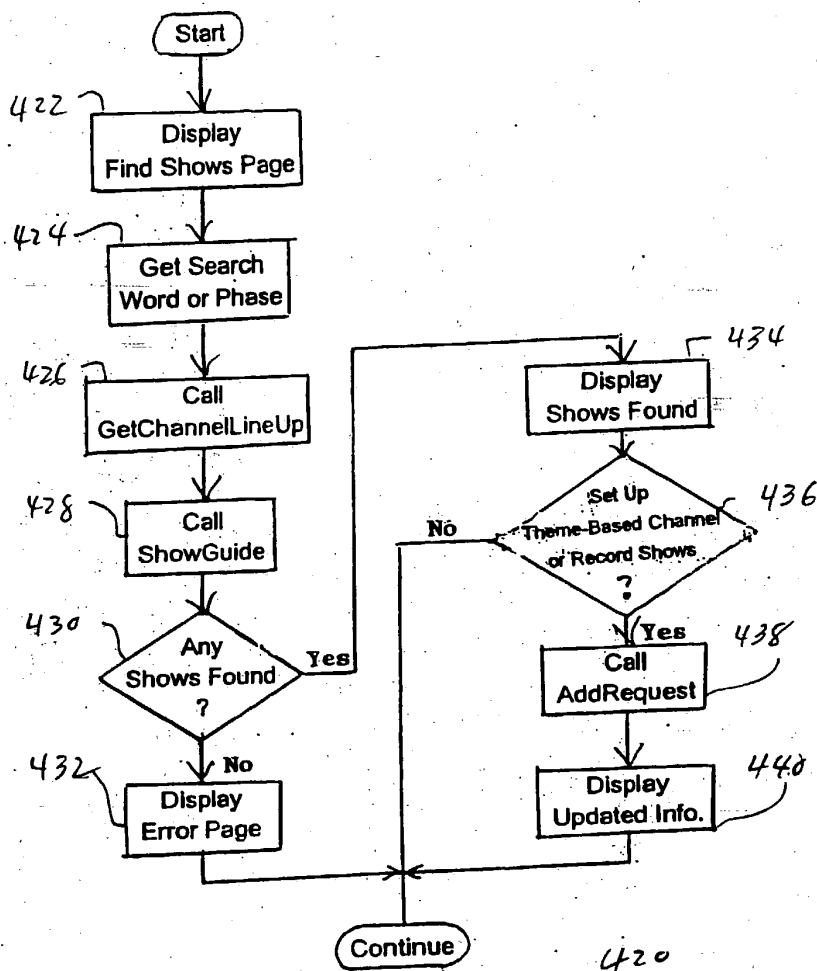


FIG. 23

Recording duration:

Start Date

Mar

7

2001

Start Time

:

AM

End Time

:

AM

Channel

0 OXYGEN

Quality

Extended

Guaranteed

Yes

Submit Request

FIG. 24A

my replaytv

Channel Guide Find Shows Manual Record Replay Guide

preferences help logout

Manual Record

3h 45m available at medium quality
as of last connection

Single Recording Repeat Recording

Days ☐ Mon ☒ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Start Time 7 : 58 PM End Time 11 : 02 PM

Channel 4 KRON

Quality Standard

Guaranteed Yes

auto request

452

FIG. 24B

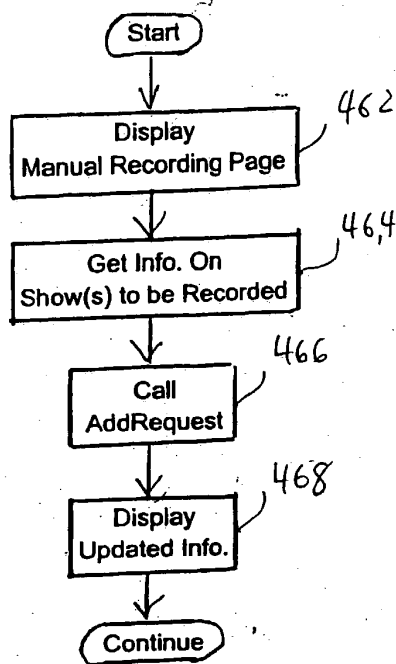


FIG. 25

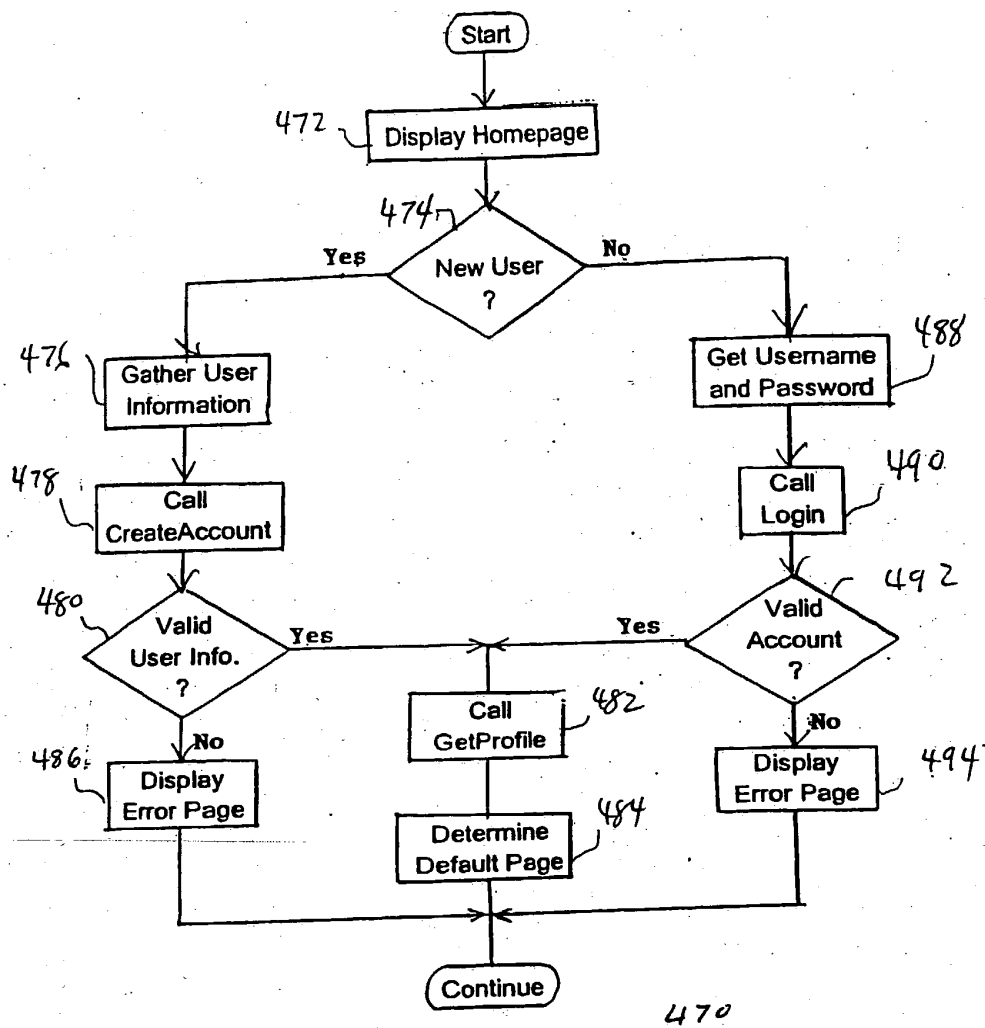
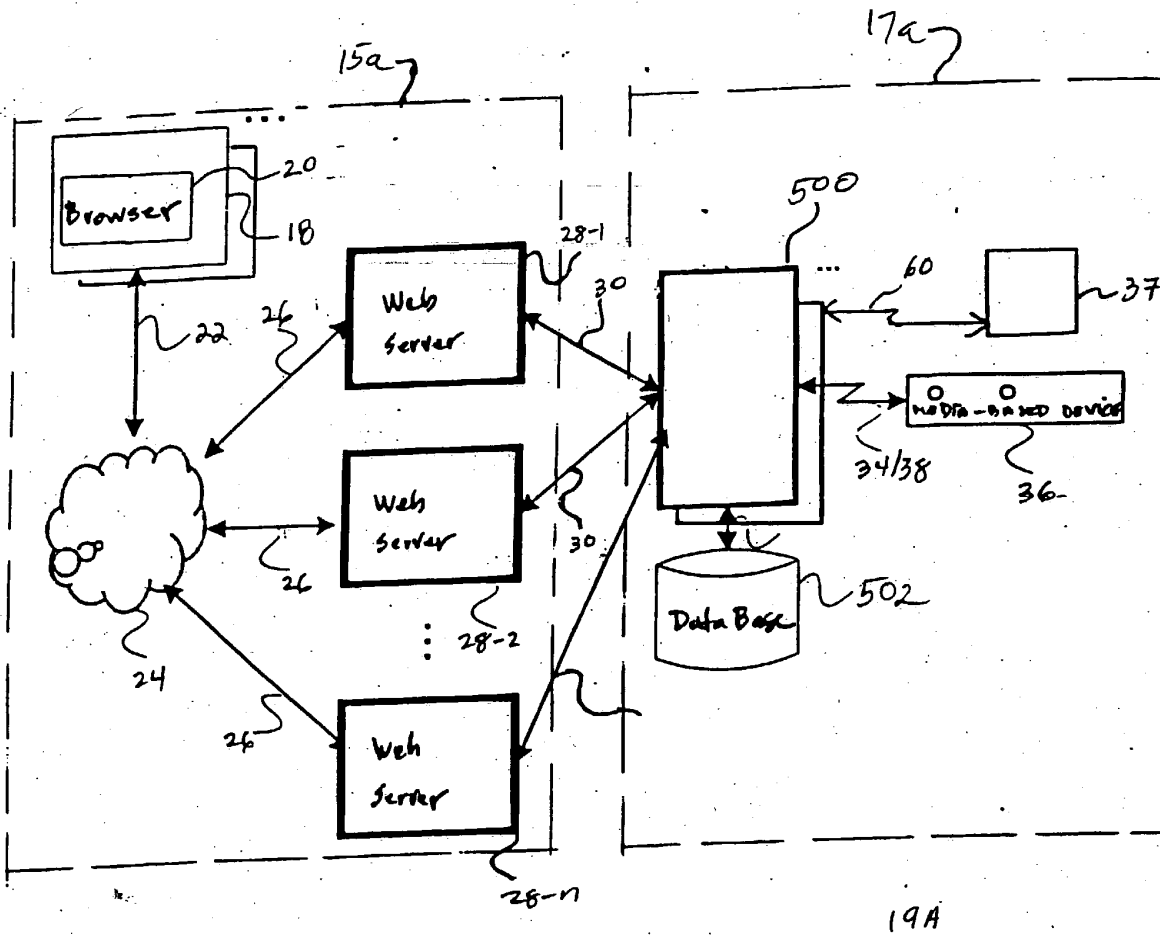


FIG. 26



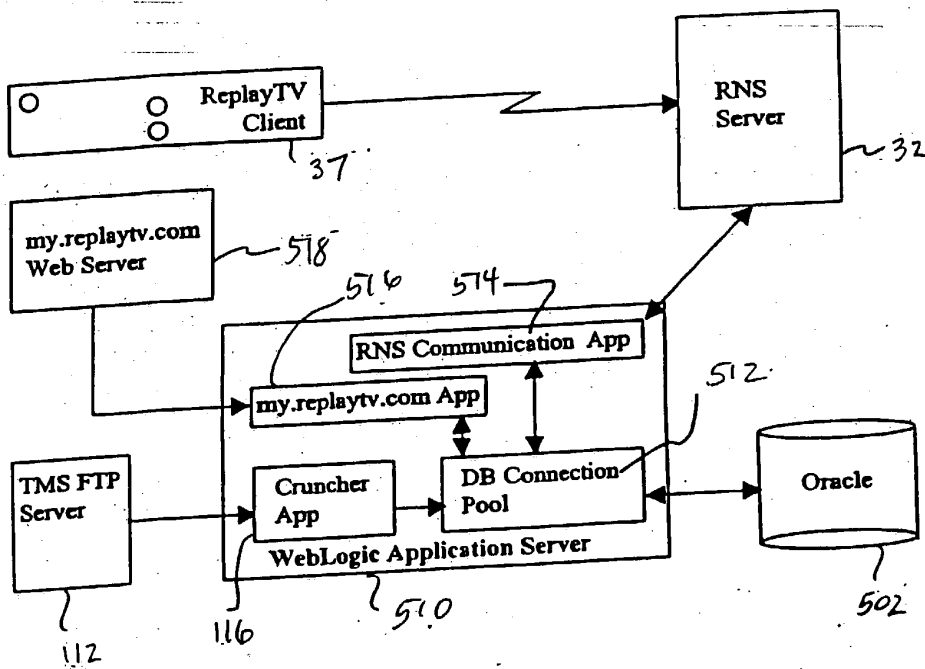


FIG. 28

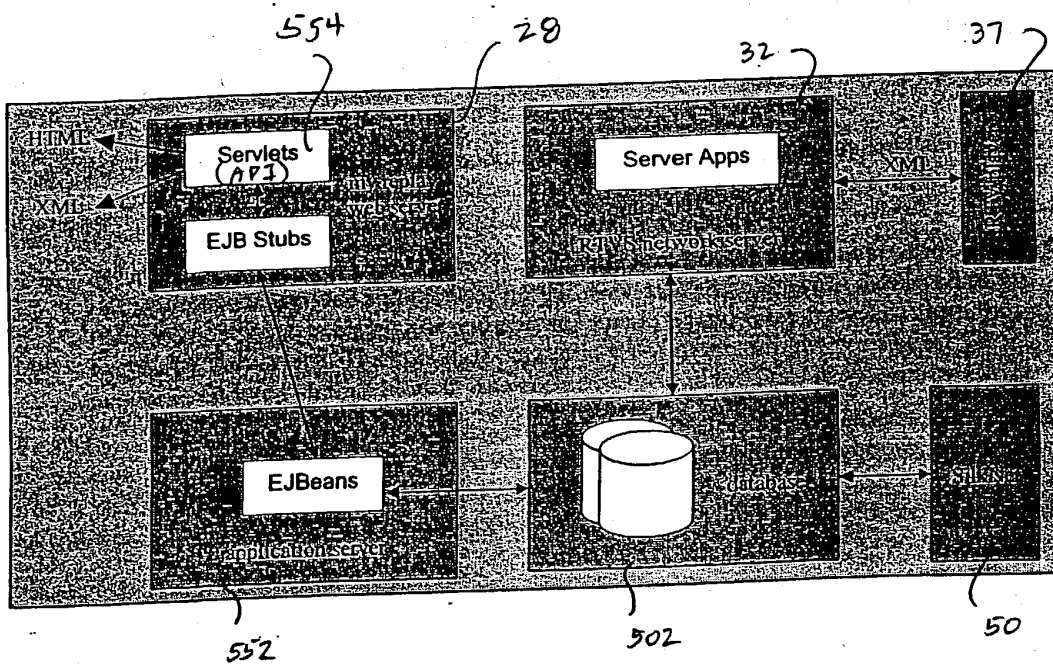


FIG. 29

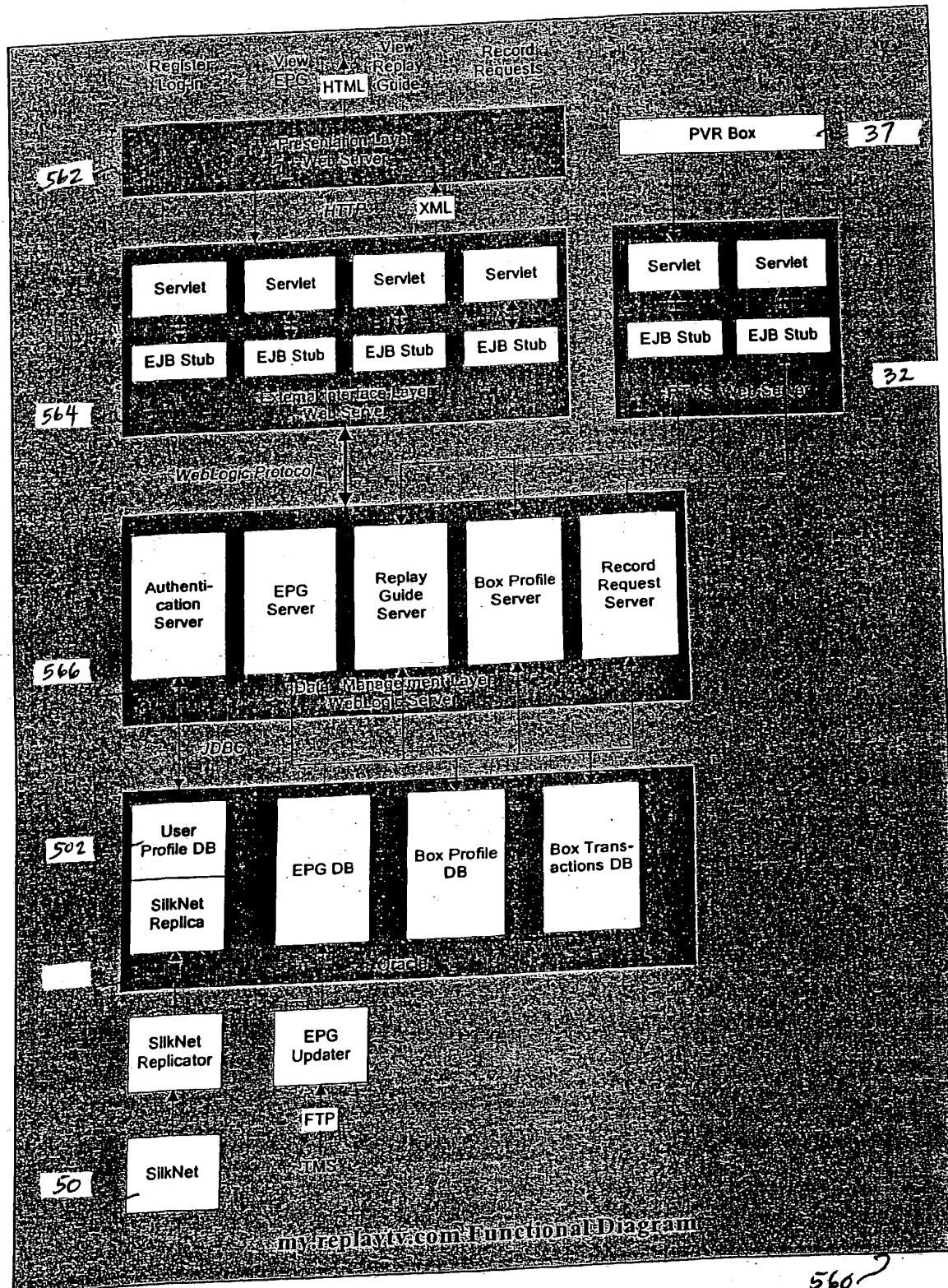


FIG. 30

560

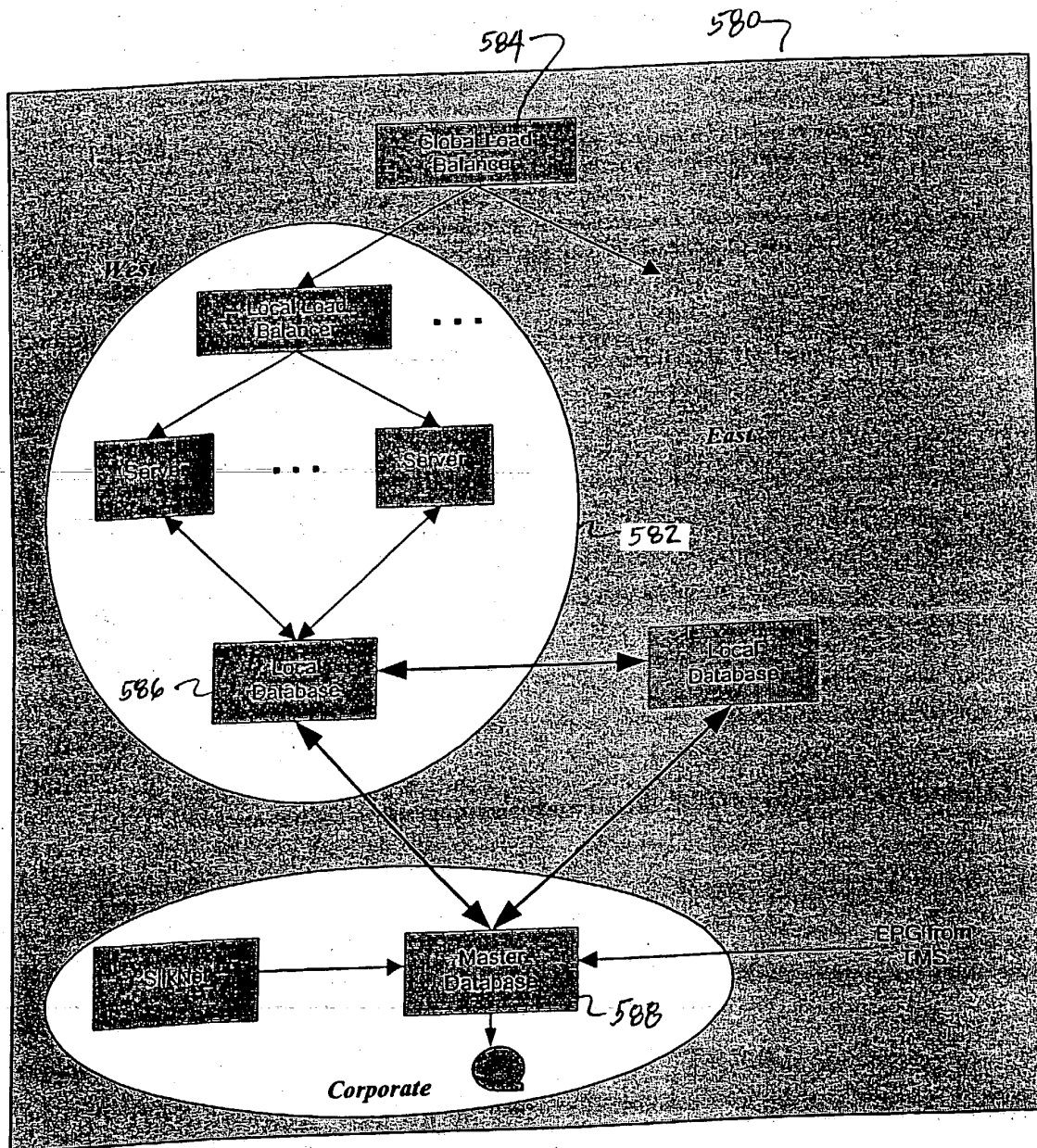


FIG. 31